

CLAIMS

What is claimed is:

- 5 1. A model content provider for receiving queries from a user interface portion having a plurality of GUI API's running applications, and for providing elements of the query to a query model, the model content provider comprising:

 a plurality of API-specific content viewers communicating with corresponding ones
10 of the running applications; and

 a reusable, API-independent content viewer communicating with the API-specific content viewers and the query model.
- 15 2. The model content provider of claim 1, wherein the API-independent content viewer further comprises a generalized set of classes.
- 20 3. The model content provider of claim 1, wherein the content viewers further comprise a hierarchical set of classes, the API-independent classes comprising the top of the hierarchy and GUI-specific classes content viewers structures comprising the bottom of the hierarchy.

4. A method for receiving queries from a user interface having a plurality of GUI API's running applications, and for providing elements of the query to a query model, the method comprising the steps of:

5 communicating with corresponding ones of the running applications using a plurality of API-specific content viewers; and

communicating with the API-specific content viewers and the query model using a reusable, API-independent content viewer

10 5. The method of claim 4, wherein the API-independent content viewer further comprises a generalized set of classes.

15 6. The method of claim 4, wherein the content viewers further comprise a hierarchical set of classes, the API-independent classes comprising the top of the hierarchy and GUI-specific classes content viewers structures comprising the bottom of the hierarchy.

20 7. An article of manufacture comprising a computer program carrier readable by a computer and embodying one or more instructions executable by the computer for receiving queries from a user interface having a plurality of GUI API's running applications, and for providing elements of the query to a query model, the computer program comprising:

program instructions for communicating with corresponding ones of the running applications using a plurality of API-specific content viewers; and

program instructions for communicating with the API-specific content viewers and the query model using a reusable, API-independent content viewer

5

8. The article of manufacture of claim 7, wherein the API-independent content viewer further comprises a generalized set of classes.

9. The article of manufacture of claim 7, wherein the content viewers further comprise a hierarchical set of classes, the API-independent classes comprising the top of the hierarchy and GUI-specific classes content viewers structures comprising the bottom of the hierarchy.

10

15